line 21, after "University" insert --,--.

Page 12, line 1, delete "is" and insert --of--;

line 5, delete "obtaiend" and insert --obtained--.

## **IN THE CLAIMS:**

1. (Amended) Ultra high molecular weight polyethylene molded articles having [molecular orientation and crystal] orientation of crystal planes.

2. (Amended) The molded articles of Claim 1, wherein the ultra high molecular weight polyethylene having [molecular orientation or crystal] orientation of crystal planes is crosslinked slightly.

4. (Amended) Artificial joint for implantation in a joint of an animal comprising the molded article of any one of Claims 1 to 3.

5. (Amended) A method for producing an ultra high molecular weight polyethylene molded article having [molecular orientation or crystal] orientation of crystal planes, comprising [wherein] slightly crosslinking the ultra high molecular weight polyethylene molded article [is crosslinked slightly] by irradiating the article with a high energy ray and thereby introducing a very small amount of crosslinking points into molecular chains of the article, [and] then heating the crosslinked ultra high molecular weight polyethylene molded article up to a compression deformable temperature, compression-deforming the article, and then

B3 (cont)

cooling the article while [is compression-deformed after heating up to a compression deformable temperature and then cooled with] keeping the article in a deformed state.

B4

7. (Amended) The method of Claim 5 or 6, wherein the compression deformable temperature is a temperature in the range of  $(T_m-50C)$  to  $(T_m+80C)$ , where  $T_m$  is a melting point of the crosslinked ultra high molecular weight polyethylene [minus 50C to the melting point plus 80C].

## Add the following claim:

9. An ultra high molecular weight polyethylene molded article having orientation of crystal planes, said article produced by slightly crosslinking the ultra high molecular weight polyethylene molded article by irradiating the article with a high energy ray and thereby introducing a very small amount of crosslinking points into molecular chains of the article, then heating the crosslinked ultra high molecular weight polyethylene molded article up to a compression deformable temperature, compression-deforming the article, and then cooling the article while keeping the article in a deformed state.

## **IN THE ABSTRACT**:

Substitute the attached ABSTRACT.